group, a substituted aryl group, a substituted heteroaryl group, a substituted alkylaryl group, a substituted alkylheteroaryl group, and *p*-aroyl-glutamate;

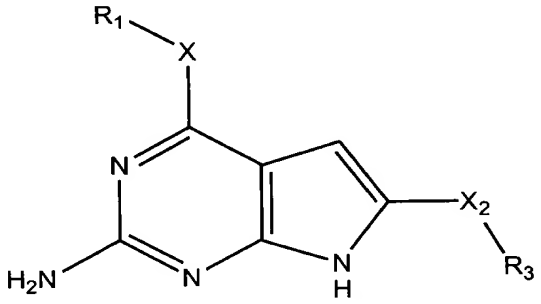
a4

and each substituent of any substituted group is the same or different and is selected from the group consisting of a straight, branched or cyclic lower alkyl, alkenyl or alkynl group of from one to about 6 carbons, an alkoxy group, an alkoxyaryloxy group, and a halogen.

In the claims:

a5

22. (Amended) A compound, and pharmaceutically acceptable salts, solvates and prodrugs thereof, having the formula (3):



(3)

where X and X_2 are from one to about three atoms, are the same or different and if R_1 or R_3 is not present, are independently selected from the group consisting of hydrogen, an alkyl group, an alkenyl group, a heteroalkyl group and a heteroalkenyl group, and if R_1 or R_3 is present, X and X_2 are independently selected from the group consisting of an alkylene group, a heteroalkylene group, an alkenylene group and a heteroalkenylene group;

and any carbons or nitrogens of said alkyl group, alkylene group, alkenyl group, alkenylene group, heteroalkyl group, heteroalkylene group, heteroalkenylene group or heteroalkenyl group can optionally be substituted with a straight, branched or cyclic lower alkyl group of from 1 to about 6 carbons;

at least one of R_1 or R_3 is present;

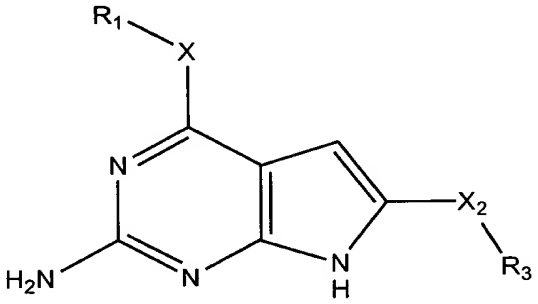
if present, R_1 is selected from the group consisting of hydrogen, an alicyclic group, a heterocyclic group, an aryl group, a heteroaryl group, an alkylaryl group, a alkylheteroaryl group, a substituted aryl group, a substituted heteroaryl group, a substituted alkylaryl group and a substituted alkylheteroaryl group;

if present, R_3 is selected from the group consisting of hydrogen, an alicyclic group, a heterocyclic group, an aryl group, a heteroaryl group, an alkylaryl group, a

alkylheteroaryl group, a substituted aryl group, a substituted heteroaryl group, a substituted alkylaryl group, a substituted alkylheteroaryl group, and *p*-aroyl-glutamate;

and each substituent of any substituted group is the same or different and is selected from the group consisting of a straight, branched or cyclic lower alkyl, alkenyl or alkynl group of from one to about 6 carbons, an alkoxy group, an alkoxyaryloxy group, and a halogen.

29. (Amended) A method of inhibiting at least one enzyme selected from the group consisting of a receptor tyrosine kinase, dihydrofolate reductase and thymidylate synthase, for treatment of a disease condition in a patient, mediated by inhibition of any of these enzymes, by administering to a patient in need thereof an effective amount of a compound having the formula (3):



(3)

where X and X_2 are from one to about three atoms, are the same or different and if R_1 or R_3 is not present, are independently selected from the group consisting of hydrogen, an alkyl group, an alkenyl group, a heteroalkyl group and a heteroalkenyl group, and if R_1 or R_3 is present, X and X_2 are independently selected from the group consisting of an alkylene group, a heteroalkylene group, an alkenylene group and a heteroalkenylene group;

and any carbons or nitrogens of said alkyl group, alkylene group, alkenyl group, alkenylene group, heteroalkyl group, heteroalkylene group, heteroalkenylene group or heteroalkenyl group can optionally be substituted with a straight, branched or cyclic lower alkyl group of from 1 to about 6 carbons;

at least one of R_1 or R_3 is present;

if present, R_1 is selected from the group consisting of hydrogen, an alicyclic group, a heterocyclic group, an aryl group, a heteroaryl group, an alkylaryl group, a alkylheteroaryl group, a substituted aryl group, a substituted heteroaryl group, a substituted alkylaryl group and a substituted alkylheteroaryl group;

if present, R_3 is selected from the group consisting of hydrogen, an alicyclic group, a heterocyclic group, an aryl group, a heteroaryl group, an alkylaryl group, a alkylheteroaryl group, a substituted aryl group, a substituted heteroaryl group, a substituted alkylaryl group, a substituted alkylheteroaryl group, and *p*-aroyl-glutamate;

and each substituent of any substituted group is the same or different and is selected from the group consisting of a straight, branched or cyclic lower alkyl, alkenyl or alkynl group of from one to about 6 carbons, an alkoxy group, an alkoxyaryloxy group, and a halogen.

31. The method of Claim 29, wherein said disease condition is tumor growth, cell proliferation or angiogenesis.

32. The method of Claim 29, wherein said disease condition is selected from the group consisting of infection caused by *Pneumocystis carinii*, *Toxoplasma gondii*, *Mycobacterium tuberculosis* and *Mycobacterium avium*.

34. The method of Claim 30, further comprising the step of administering said compound by a method selected from the group consisting of parenteral administration, oral administration and topical administration.

Please add the following new claims:

35. R_1 The compound of Claim 22, wherein X is NH-.

36. The compound of Claim 35, wherein R_1 is *m*-bromobenzene.

37. The compound of Claim 36, wherein X_2 is CH_2-CH_2.

38. The compound of Claim 37, wherein R_3 is 2-pyridine.

39. The compound of Claim 37, wherein R_3 is benzene.

40. The compound of Claim 37, wherein R_3 is *p*-methoxy benzene.

41. The compound of Claim 37, wherein R_3 is *o*-chlorobenzene.

42. The compound of Claim 37, wherein R_3 is 1-naphthalene.

43. The compound of Claim 37, wherein R_3 is 2-naphthalene.

44. The compound of Claim 29, wherein X is NH-.

45. The compound of Claim 44, wherein is *m*-bromobenzene.

46. The compound of Claim 45, wherein X_2 is CH_2-CH_2.

47. The compound of Claim 45, wherein R_3 is 2-pyridine.

48. The compound of Claim 45, wherein R_3 is benzene.

49. The compound of Claim 45, wherein R_3 is *p*-methoxy benzene.